



**Calhoun: The NPS Institutional Archive**  
**DSpace Repository**

---

Theses and Dissertations

1. Thesis and Dissertation Collection, all items

---

1985-09

# An evaluation of techniques for ranking academic information systems journals

Huskey, Winnie L.; Hayes, TeddiAnn S.

Monterey, California. Naval Postgraduate School

---

<http://hdl.handle.net/10945/39949>

---

This publication is a work of the U.S. Government as defined in Title 17, United States Code, Section 101. Copyright protection is not available for this work in the United States.

*Downloaded from NPS Archive: Calhoun*



Calhoun is the Naval Postgraduate School's public access digital repository for research materials and institutional publications created by the NPS community. Calhoun is named for Professor of Mathematics Guy K. Calhoun, NPS's first appointed -- and published -- scholarly author.

**Dudley Knox Library / Naval Postgraduate School**  
**411 Dyer Road / 1 University Circle**  
**Monterey, California USA 93943**

<http://www.nps.edu/library>

2

**NAVAL POSTGRADUATE SCHOOL**  
**Monterey, California**

**AD-A275 179**



**S** DTIC  
ELECTE  
FEB 02 1994  
**A**

**THESIS**

**AN EVALUATION OF TECHNIQUES FOR RANKING  
ACADEMIC INFORMATION SYSTEMS JOURNALS**

by

**TeddiAnn S. Hayes**

and

**Winnie L. Huskey**

**September 1993**

**Thesis Advisor:**

**William James Haga**

**Approved for public release; distribution is unlimited.**

**94 2 01 10 7**

6898

**94-03293**



REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE September 23, 1993		3. REPORT TYPE AND DATES COVERED Master's Thesis
4. TITLE AND SUBTITLE AN EVALUATION OF TECHNIQUES FOR RANKING ACADEMIC INFORMATION SYSTEMS JOURNALS			5. FUNDING NUMBERS	
6. AUTHOR(S) TeddiAnn S. Hayes and Winnie L. Huskey				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.				
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			12b. DISTRIBUTION CODE A	
13. ABSTRACT (maximum 200 words) In an evolution from academic journal prestige ranking procedures used in economics, marketing, sociology and previous efforts in information systems(IS), this study developed prestige weights for IS journals based on a probability sample of 400 IS faculty in the United States and Canada. The weights are derived from subjective rankings by survey questionnaire. In addition to developing a master schedule of journal prestige weights, differences in prestige ranking are examined according to location of respondents' employing school, respondents' academic specialties within IS, types of degrees held by the respondents, years in which respondents earned terminal degree at a graduate school with a national ranking. Characteristics of respondents are compared to nonrespondents to test the hypothesis the respondents are representative of the sample frame. Implications of the procedure developed here are discussed in terms of its application to evaluation of research productivity in DOD laboratories.				
14. SUBJECT TERMS Deming, TQM, TQL, survey assessment of TQL knowledge, education, experience, and attitude, Naval Postgraduate School, Cohort of July 1993.			15. NUMBER OF PAGES 69	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UL	

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)

Prescribed by ANSI Std. Z39-18

Approved for public release; distribution is unlimited.

An Evaluation of techniques for Ranking  
Academic Information Systems Journals

by

TeddiAnn S. Hayes  
Lieutenant, United States Navy  
B.S., University of California, Davis, 1980

Winnie L. Huskey  
Lieutenant, United States Navy  
B.S., Marquette University, 1988

Submitted in partial fulfillment  
of the requirements for the degree of

MASTER OF SCIENCE IN  
INFORMATION TECHNOLOGY MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL  
SEPTEMBER 1993

Authors:

TeddiAnn S. Hayes

Winnie L. Huskey

Approved by:

William James Haga, Principal Advisor

Frank Barrett, Associate Advisor

David R. Whipple, Chairman  
Department of Administrative Sciences

## ABSTRACT

In an evolution from academic journal prestige ranking procedures used in economics, marketing, sociology and previous efforts in information systems (IS), this study developed prestige weights for IS journals based on a probability sample of 400 MIS faculty in the United States and Canada. The weights are derived from subjective rankings by survey questionnaire. In addition to developing a master schedule of journal prestige weights, differences in prestige weighting are examined according to location of respondents' employing school, respondents' academic specialties within IS, types of degrees held by the respondents, and years in which respondents earned terminal degree at a graduate school with a national ranking. Characteristics of respondents are compared to nonrespondents to test the hypothesis the respondents are representative of the sample frame. Implications of the procedure developed here are discussed in terms of its application to evaluation of research productivity in DOD laboratories.

iii

DECLASSIFIED

Accession For	
NTIS CRAB	✓
DTIC TAB	✓
Unannounced	✓
Justification	
By	
Distribution /	
Availability Codes	
Dist	Avail and/or Special
A-1	

## TABLE OF CONTENTS

I. INTRODUCTION . . . . .	1
A. BACKGROUND . . . . .	1
B. OBJECTIVE AND SCOPE . . . . .	2
II. LITERATURE REVIEW . . . . .	3
A. BRIEF BACKGROUND . . . . .	3
B. REASON FOR RANKING JOURNALS . . . . .	3
C. BASIS FOR THE RANKING . . . . .	4
1. Sociology . . . . .	5
2. Economics . . . . .	7
3. Management Information Systems (MIS) . . . . .	12
D. CONCLUSION . . . . .	15
III. METHODOLOGY . . . . .	17
A. TEST SURVEY AND QUESTIONNAIRE SELECTION . . . . .	17
B. THE SAMPLE . . . . .	19
C. CONDUCT OF STUDY . . . . .	20
D. VALIDATION . . . . .	21
E. ANALYSIS OF RESPONDENTS VERSUS NON-RESPONDENTS . . . . .	21
1. Prestige of University vs. Response Rates . . . . .	21
2. Regions vs. Response Rates . . . . .	22
3. Academic Specialties vs. Response Rates . . . . .	24
4. Degree Types vs. Response Rates . . . . .	25
5. Degree Dates vs. Response Rates . . . . .	26

IV. FINDINGS . . . . .	28
A. IS JOURNAL WEIGHTED RANKING . . . . .	28
1. Intensity and Extensity of Prestige . . . . .	28
B. PRESTIGE OF UNIVERSITY AND JOURNAL WEIGHTING . . . . .	30
C. REGION AND JOURNAL WEIGHTING . . . . .	33
D. ACADEMIC SPECIALTY AND JOURNAL WEIGHTING . . . . .	35
E. DEGREE TYPE AND JOURNAL WEIGHTING . . . . .	37
F. DEGREE DATE AND JOURNAL WEIGHTING . . . . .	40
V. DISCUSSION AND ANALYSIS . . . . .	43
A. COMPARISON OF RANKINGS . . . . .	43
B. INTRODUCTION OF NEW JOURNALS . . . . .	45
C. SAMPLE DIFFERENCES . . . . .	45
D. VALUE OF SURVEY METHODOLOGY . . . . .	46
E. SURVEY DIFFERENCES . . . . .	47
F. LESSONS LEARNED . . . . .	48
G. CONCLUSION . . . . .	49
APPENDIX A (FORM 1) . . . . .	51
APPENDIX B (FORM 2) . . . . .	53
APPENDIX C (SURVEY) . . . . .	55
APPENDIX D (ACADEMIC SPECIALTIES) . . . . .	57
LIST OF REFERENCES . . . . .	59
INITIAL DISTRIBUTION LIST . . . . .	62

## I. INTRODUCTION

### A. BACKGROUND

Although they are not quantified, subjective notions of the differential prestige of academic journals are a major factor in decisions about hiring, promotion and tenure for information systems (MIS) faculty. Rather than evaluate a faculty member by the number of published articles, decision makers are drawn to judge a publication record in terms of the prestige of the particular journals in which articles appear. This weighting process is subjective and impressionistic. Borrowing from the work of reference disciplines, especially sociology (Glenn, 1971), this study develops a schedule of prestige weights for IS journals. The weights are based on a survey of 400 MIS faculty listed in the 1992 *Directory of Management Information System Faculty*.

The schedule of prestige weights is provided for 24 journals from MIS and related fields. We examined the differences in the weighted ranking of IS journals according to the respondent's prestige of university, region, academic specialty, degree type, and degree date.

Prestige of IS journals is based on perceptions of academicians in the MIS field. Many methodologies (e.g. citation analysis, ranking, weighting) have been used by



sociologists (Glenn, 1971, and Shamblin, 1970), economists (Laband, 1985, and Medoff, 1989), and MIS professionals (Shim et al., 1987, and Ramesh and Stohr, 1987) to obtain journal rankings.

## **B. OBJECTIVE AND SCOPE**

The objective of this thesis is an extensive examination of the methodologies used in quantifying the impressionistic value of prestige. A survey of MIS academicians will be used to determine a weighted ranking of IS journals. Five independent variables will be used in conjunction with the survey data to determine if they have any effect on the weighted ranking or response rate.

With DoD's recent interest in re-engineering business processes, this study provides a tool for measuring performance evaluations. DoD has the continual problem of evaluating a manager's performance, in many respects a quantification of abstract qualities. The methodology used in our study has significant implications in terms of its application to evaluations of research productivity in DoD laboratories and schools.

## **II. LITERATURE REVIEW**

### **A. BRIEF BACKGROUND**

The field of Management Information Systems (MIS) has grown in proportion to the technological advances in computer hardware and software. Concurrently, universities have opened MIS departments and are expanding their academic staff for the purpose of teaching and doing research. As in most fields, article publication is an important part of the hiring, promotion and tenure processes. A 1980 survey of deans associated with the American Association of Collegiate Schools of Business (AACSB) indicated that publication was a requirement for promotion and publication in a journal of merit has a definite impact on hiring decisions. This is supported by research done by Mabry and Sharplin (1985). They found that the quality or prestige of the publication had an impact when promotions were considered.

### **B. REASON FOR RANKING JOURNALS**

Determining which journals are prestigious is important in the MIS discipline. A list of IS journals, ranked according to mean weight will aid faculty who are in the position to make hiring, promotion, and tenure decisions.

### C. BASIS FOR THE RANKING

Doke and Luke (1987) equated prestige with quality. Prestige, being an abstract property, is defined in the Webster's Unabridged Dictionary as "standing or estimation in the eyes of people; weight or credit in general opinion; subject attribute, often used interchangeably with quality." In studies by Lewis (1968) and Knudsen and Vaughan (1969), prestige was considered different from quality, both in the way it is measured and its conceptual rather than concrete existence.

Shamblin (1970) contends that objective tests will give a measure of quality while subjective tests give a measure of prestige. He believed that some faculty members may think a journal has qualitative value, but is not necessarily prestigious. Lewis (1968) found a disparity between objective and subjective rankings. He criticized prestige rankings by saying they are meaningless outside the immediate community. They do not relate to dependent variables of the material world as closely as objective criteria. On the other hand, Knudsen and Vaughan (1969) suggest some relationships between the objective and subjective results of surveys.

Doke and Luke (1987) did a survey on the quality of IS journals among the faculty of business schools. The instructions were to rank the top ten journals in order of decreasing importance. An importance/prestige index was

created using a formula for the number of times a journal was given the same rank by respondents. This survey used a formula value for prestige. However, this is not an effective measure of prestige, since prestige is abstract and quality does not necessarily equate to prestige.

Regardless of how journal prestige is measured, it affects decisions about hiring, promotion, and tenure. According to Gordon and Purvis (1991), the common goal of determining a ranking of journals in any of the disciplines was to provide university review committees with one fairly objective measure of "research excellence" for use in promotion and tenure decisions.

### **1. Sociology**

Studies in the field of sociology provided varying methodologies for gathering information to ascertain quality or a ranking for sociological journals. The journals were ranked by a variety of methods. Citation analysis (the number of times a journal is cited) was the most common method of determining the journals' quality. This method does not prove to be the best for the following reasons: (1) the size of the journal will determine the number of potentially citable items; (2) a longer established journal will have more citations than recently established journals; (3) journal circulation, dissemination of reprints, availability in library collections and coverage by secondary indexing and abstracting services will influence

citation patterns; (4) a few articles that are highly cited may distort the citation patterns for a journal; (5) journal article length and number of references may influence citation patterns; (6) journal prestige differentiation will influence citation patterns and (7) the reputation of authors and the controversiality of subject matter published in the journal will influence citations patterns and a growth in the literature (changes in the number of journals or articles published) will influence citation patterns.

Glenn (1971) evaluated the journals for prestige using a list of journals and arbitrarily assigned a benchmark weight to one of the journals. A benchmark weight of ten was used to keep a relative frame of reference on the numbers used in the weighting. For example, a respondent in the sample, who liked a journal as much as another respondent could use a wider range of numbers (1 to 100 instead of 1 to 10) to express his or her opinion even though the journal was equally liked by both respondents. By assigning a benchmark weight, the two respondents will be forced to weight all the journals in accordance with the pre-assigned weighted journal.

Glenn (1971) sent the survey to faculty members randomly drawn from the 1969 *ASA Guide to Graduate Departments of Sociology*. This sample was representative of senior faculty who would be involved in the hiring, promotion, and tenure decision process, as well as the

junior faculty who would be using the journals for research. The survey yielded a weighted prestige ranking of the sociology journals. Glenn (1971) believed that any sampling biases that might have occurred in the faculty due to geographical region, prestige of university, differing degree types, and age groups was addressed by using a random sample.

## **2. Economics**

The literature on journal's prestige in economics falls into two categories: (a) those dealing with the publishing performance of economists and their departments and (b) those concerned with the prestige value of journals as a measure of research performance. Exploring the methods of obtaining the prestige value was useful in determining which methods were to be used in ranking journals within a specific discipline. (Medoff, 1989; Gibbons and Fish, 1991)

Citation frequency was commonly used to determine rankings of finance and economic journals. These citation frequencies were multiplied by factors based on previous studies using a subjective rank ordering of scholarly journals in the discipline based on their perceived quality by readers (Ellis and Durden, 1991). As an example, Mabry and Sharplin (1985) based their study on the relative importance of journals used in finance research on a previous survey by Coe and Weinstock (1983). Coe and Weinstock (1983) surveyed department chairs to seek a

subjective ranking of finance journals. However, there were some flaws in the survey; it was short and had an incomplete list of journals. It was left to the respondents to fill in additional journals that they deemed as important.

According to Mabry and Sharplin (1985), "either no initial list at all or an extensive one should be provided to avoid bias toward listed journals." Furthermore, "while the impressions of journal quality by department chairs are useful in certain contexts, academic administrators represent a small, specialized group and may be poor surrogates for all academic researchers."

Even though survey methodologies may not always be the most appropriate measure of journal quality due to the bias imposed by the design of the questionnaire or the groups selected to judge the journals, they still provide the **subjective** perceptions of significant faculty with respect to the relative quality of academic journals.

"However, the most **objective** measure for addressing journal quality as most scholars perceive it is the citation frequency of published studies." (Mabry and Sharplin, 1985) Citation frequency is an objective technique for evaluating the impact of scholarly research. It has been used more frequently than subjective survey techniques (Mabry and Sharplin, 1985).

A study by Ellis and Durden (1991) identifies citation frequency as one of the two most important factors

that influence an economist's perceptions of journal quality. A journal's quality can reflect the impact its articles may have disseminating knowledge within the discipline (impact measured by citation frequency; Liebowitz and Palmer, 1984). However, a journal can still maintain a certain level of prestige among colleagues in the profession well after its citation frequency declines.

Economists have mixed feelings regarding the measurement of research quality. Ellis and Durden (1991) and Liebowitz and Palmer (1984) believe strongly in citation frequency. Others, such as Medoff (1989), criticize citation counts as a measure of research quality, especially of individual economists. First, counting pages or articles in journals ignores the contribution that books may make to economics. Second, some articles may be published in well-known journals but may not be used for research or worse yet, even read. "Publication in a major journal does not necessarily measure the impact of the work, its creative insights, or its seminal contribution," Medoff (1989) explains. Therefore, articles in well-known journals are an imperfect measure of quality. And third, there is always the possibility of bias in quantitative publication ranking. Laband (1985) found that on average over two extra pages are falsely credited to authors affiliated with the same school as the editor of a journal.



Hawkins et al. (1973) explored the notion of implicit prestige ranking attached to a journal. Their initial questionnaire was sent to 160 academic economists which were stratified into four groups of 40 each. The groups were: (1) deans and department chairs at large research-oriented universities; (2) faculty members at such universities; (3) individuals with major administrative responsibilities at smaller teaching-oriented colleges; and (4) faculty members at such colleges. The sample was also stratified by age group and academic department.

Out of the initial 160 questionnaires sent, 111 were returned. The statistical information was sent back to the respondents (with a reminder of how they ranked the journals the first time) in a second Delphi wave. Ninety-two of those were returned. In the second survey, eighty percent of respondents changed at least one point score.

The study also reported a familiarity index because the percentage of respondents who reacted to each particular journal were to give a point score only if they were familiar with a journal. An alternative prestige ranking based on the mean point score times the familiarity index was shown, this gave an equal weight to perceived quality and presumed readership in establishing the prestige of a given journal.

The researchers also sought to reveal the prejudice that economists have toward general, well-known journals.

They included two fictitious journal names to test the reliability of their analysis. The fictitious *Journal of Economic and Statistical Theory* (J.E.S.T), ranked in the top third of all journals surveyed (twenty-fourth out of 87). The other fictitious journal, entitled *Regional Studies and Economic Change* (R.S.E.C.)--obviously a more applied and specialized journal, but equally nonexistent--ranked in the bottom third. (Hawkins et al., 1973) This demonstrates an ego attribute in journal ranking. This is that people do not like to admit their own ignorance or are careless when reviewing the titles, merely marking off a journal name if it sounds familiar or scholarly.

Gordon and Purvis (1991) combined research from a variety of disciplines to measure research performance in industrial relations. The disciplines include economics, industrial psychology, organizational behavior, and sociology. The study discussed three ways in which journal quality may be measured. First, by surveying a representative sample of members in the discipline to construct a hierarchy of journals. Second, by using citation indicators to rank journals. And third, consulting acceptance rates of articles into journals. Cabell (1988) reported the acceptance rates for hundreds of journals in industrial relations. One should keep in mind that "although acceptance rates are a fairly stable property of journals, they may not correlate significantly with prestige

ratings." (Hargens, 1988) After reviewing the three ways to measure quality, we concluded that surveying a representative sample is the best course for constructing a hierarchy of journals.

### **3. Management Information Systems (MIS)**

The number of IS journals used in the discipline is growing and the number of articles referring to MIS matters in non-IS specific journals is also increasing (Hamilton and Ives, 1982, Ramesh and Stohr, 1987). Business journals include MIS topics even though they are not solely devoted to MIS. Shim et al. (1987) and Davis and Fry (1986) did studies which ranked IS journals, however, their studies used only five and twelve journals, respectively.

Other methods of ranking have been attempted. Koong and Weistroffer (1989) ranked the top 15 MIS journals from a list of 70 journals. They asked colleagues to choose the three best journals for reading and the three best journals for publishing. This was not necessarily an indication of quality. If a certain journal has a higher article acceptance rate than another, then more colleagues will respond favorably to that particular journal for publishing, it does not mean they have a high opinion of the journal for reading purposes.

Nord and Nord (1991) used the results of three other studies to pick the top IS journals. IS journals common in the top 15 of all three studies were picked as the top five

IS journals. This procedure gave the MIS field only five top journals. But a larger number of journals are currently being used and need to be recognized in the MIS field. As mentioned previously, Koong and Weistroffer (1989) listed over 70 IS-related journals. Therefore, limiting the number of top journals to five does not give the selection or variation needed for studying the growing MIS field. Although the 70 journals were not dedicated solely to MIS issues, they still provided information to MIS colleagues as well as those affiliated with related disciplines.

Hamilton and Ives (1983) did a six measure journal stratification resulting in four strata of journals using a composite indicator of journal importance. The journals were split into four disciplines; MIS, Computer Science, Management Science, and Management. Since the MIS discipline is interwoven in other disciplines, the distinction can not be made between the material within the journals of each discipline. Because the articles are interchangeable, not belonging exclusively to one discipline, it is not imperative to have separate categories for ranking purposes.

Nonetheless, in the Hamilton and Ives (1983) study, the surveys went to a senior group of "knowledgeable and recognized experts" in the academic MIS community. It was believed they could provide a more informed judgement about journal contributions than junior faculty. However, many

less-known MIS faculty are involved in promotion and tenure decisions. Also, junior faculty are active in publishing (often more than senior faculty) and are more anxious about publishing in prestigious journals. Senior faculty either have stopped publishing or can publish with ease in any journal because they are well-known faculty statesmen. They are less sensitive to the current prestige of journals. They would respect the opinion of their honored colleagues, but probably do not know what those opinions are. They have their own opinions about journal prestige which would be an influential factor in their decision processes.

Ramesh and Stohr (1987) used two separate surveys to study journal prestige. The first was sent to journal editors and conference chairs to understand the refereeing and acceptance process. The second was sent to 200 researchers in computer science (100 obtained from a list of department chairs at major United States and Canadian universities, the other 100 eminent in computer science research areas) and 200 researchers in MIS (200 obtained from the 1987 McGraw-Hill *Directory of Information Systems Faculty*). Their aim was to measure the perceived research quality of 33 journals and 14 conference proceedings. The study shows, once again, how such perceptions influence hiring, promotion and tenure decisions.

Although a number of publications were related to the MIS field, some were not necessarily core IS journals.

Ramesh and Stohr (1987) also noted the inherent problems of opinion surveys; they are void of objective facts and suffer biases, while measuring subjective perceptions. Computer science respondents returned forty-two percent of the surveys and MIS respondents returned sixty percent of the surveys. Most of the respondents were full professors. A familiarity question ranging from "don't know" to "know well" was included in the survey. This was an attitudinal question about behavior. A research quality question ranging from "poor" to "excellent" was also part of the survey. Those respondents who claimed no knowledge of a publication but gave it a quality rating were excluded from the analysis. In a comparison with Hamilton and Ives (1983) and Shim et al. (1986) studies of the top ten MIS journals, Ramesh and Stohr's (1987) findings were in agreement with eight journals appearing in both studies. Even though Ramesh and Stohr (1987) provided information about the perceived quality of MIS journals, they noted that "the relative rankings of the publications ... indicate an academic field that is still in its formative stages."

#### **D. CONCLUSION**

In every discipline there are two distinct career paths to follow. One pursues the discipline as a professional or as an academician. Both careers need the most current information available in the field, but may use publications

in a different manner (Babchuk and Bates, 1962). This study showed that professionals referred less often to journals and publications than do academicians. Therefore, IS academicians are best suited to weight IS journals.

In addition, a study modeled after Glenn's (1971) sociological study on perceived journal prestige by weighting has not been done in the MIS field. Such a study would provide reference by which the vita of candidates for hiring, promotion and tenure could be judged.

### **III.METHODOLOGY**

A methodology influenced by the work of Glenn, (1971) was used to obtain a ranking of IS journals. It identifies prestigious IS journals through a survey of MIS academicians. The findings in this study are based solely on the respondents perceptions of IS journals.

#### **A. TEST SURVEY AND QUESTIONNAIRE SELECTION**

The survey methodology was narrowed down to two different forms: (a) FORM 1 included a cover letter with instructions to rank the top ten journals from the list of IS core journals. The journals were to be ranked (one through ten) in accordance with each colleague's judgement and (b) Form 2 included a cover letter with instructions to assign weights to the list of IS core journals.

A test survey of each method was conducted among members of the MIS staff at the Naval Postgraduate School (NPS). A list of 20 IS core journals was obtained by using a consensus of journal names from Hamilton and Ives (1983), Davis (1980) and Vogel and Wetherbe (1984). The twelve member staff first received FORM 1 (Appendix A) and three weeks later received FORM 2 (Appendix B).

On FORM 2, *Management Information Systems Quarterly* (MISQ) was selected as a standard of reference, and was



given a weight of 10. Other journals were to be weighted accordingly.

Comments associated with FORM 1 (the ranking) were: One staff member noted a need for more categories of journals (e.g. Research, Theoretical, Application, Computer Science, and Management). Another found the familiarity issue a problem. Respondents were uncertain how to respond if a journal was unfamiliar; give it a low score or none at all. There was also a sense of curiosity associated with the mix of scholarly and trade publications.

FORM 2 (the weighting) comments were: One staff member said that it would have been easier if we stated the **point of view** of which the grading was based (e.g. readership, authors). Weighting the journals using MISQ as a reference seem to confound some staff members. They felt uncomfortable assigning weights as two times or one half as important as MISQ which was given a ten. One concern which was universal to both surveys was that the list of IS core journals was not inclusive. The following journals were noted as missing from the list: Decision Support Systems; ORSA Journal on Computing; ACM Transactions; IEEE Transactions; Corporate Computing; CIO Journal; CIO Magazine. All but the last three journals were added to the list of IS core journals. The last three were mentioned by only one staff member.

After reviewing the responses to the test survey, the decision was made to select FORM 2 for use in the actual survey. It seemed to elicit an overall positive response from the MIS staff. Besides the addition of four more journals to the list, minor adjustments were made to the cover letter to make it more formal and suitable for a general mailing.

Four hundred copies of the cover letter (Appendix C) were made using letterhead to make the survey appear official and 400 sheets of blue pastel paper were used for the new list of IS core journals.

#### **B. THE SAMPLE**

In order to get a representative sample of "MIS knowledgeable" people who would be generally active and experienced in the world of academia, a random sample was drawn from the *1992 McGraw-Hill Directory of Information Systems Faculty*. Four hundred MIS faculty names (out of 1800) were chosen to represent about 20 percent of the total population. To achieve a random sampling, the fourth name and fifth alternately were selected from the MIS directory. The starting point was the seventh name (which was chosen by tossing dice).

The respondent's and non-respondent's prestige of university, region, academic specialty, degree type, and degree date would be used in the analysis of our data.

Therefore, the names of all chosen to receive surveys were entered in a database which contained addresses, universities, regions, academic specialties, degree types, and degree dates.

### **C. CONDUCT OF STUDY**

To obtain the maximum results for a weighted ranking IS core journals, a decision was made to send surveys to MIS faculty members of universities throughout the country. Prestige, as defined earlier, is an abstract, subjective quality used in the evaluation of people's work. There is no concrete measure of prestige but it does play an important role in decision processes. A subjective prestige ranking of journals would be the best guide for faculty making hiring, promotion, and tenure decisions.

The 400 surveys were mailed on 10 April, 1993, early enough in the spring quarter to arrive before faculty began their summer break. Completed forms began to arrive within one week. Responses continued to trickle in for three more weeks, then there was a serious drop in returns and only ten more arrived over the next six weeks. Of the 400 questionnaires mailed out, nine were returned with absolutely no weights given and various excuses for the lack of response (the most frequent being that the respondent was not familiar with any journals or with MISQ) and four more

were returned by the postal service and marked as undeliverable.

One hundred sixty-eight were returned with IS journals weighted. Therefore, 396 usable surveys were sent and 42 percent were returned. This is comparable to other surveys which had response rates of 37.8 percent (Hamilton and Ives, 1983), 31 percent (Doke and Luke, 1987) and almost 50 percent (Glenn, 1971).

#### **D. VALIDATION**

The complete database was printed out and validated manually by a two-person check. We compared the results of each respondent's completed survey to their individual entry in the database. One numeric typing error was found and was changed before the data was analyzed.

#### **E. ANALYSIS OF RESPONDENTS VERSUS NON-RESPONDENTS**

An analysis was conducted based on a statistical evaluation of the survey data using SPSS release 4.1 for IBM VM/CMS. In addition to our overall IS journal weighted ranking, we conducted analyses on survey respondents versus non-respondents over several dimensions. These include prestige of university, region, academic specialty, degree type, and degree date. We were interested in studying whether any of the variables would affect response rate.

## 1. Prestige of University vs. Response Rates

Table 1 shows the number of respondents and non-respondents and whether they obtained their degree from a nationally ranked university (Lord, 1993).

**TABLE 1**  
**RESPONDENTS AND NON-RESPONDENTS BY PRESTIGE OF UNIVERSITY**

Respond	Ranked	Not Ranked	Total
No	95	138	233
Yes	67	101	168
total	162	239	401

Ho: No difference in the responses of graduates of ranked universities and non-ranked universities.

Ha: Whether a person responded to the survey and the ranking of the university where they received their degree are statistically dependent.

Chi square	Df	Significance	Phi
.0322	1	.858	.009

In this case we fail to reject the null hypothesis. We conclude that survey response and the ranking of a university where a respondent received his or her degree are statistically independent.

## 2. Regions vs. Response Rates

Region is defined as one of four geographical areas

into which the United States was split. Table 1 gives the breakdown of states into their respective region.

**TABLE 2**  
**REGIONS OF THE UNITED STATES**

East			Midwest			South			West		
CT	DC	DE	IA	IL	IN	AL	AR	FL	AK	AZ	CA
MA	MD	ME	MI	MN	MO	GA	KY	LA	CO	HI	ID
NH	NJ	NY	ND	NE	OH	MS	NC	SC	MT	NM	NV
PA	RI	VA	OK	SD	WI	TN	TX	WV	OR	UT	WA
VT									WY		

The geographical distributions of respondents and non-respondents can be seen in Table 2.

**TABLE 3**  
**RESPONDENTS AND NON-RESPONDENTS BY REGION**

Respond	East	Midwest	South	West	Total
No	56	70	57	49	232
Yes	40	43	53	32	168
Total	96	113	110	81	400

Ho: No difference in the responses according to the region of residency.

Ha: Whether a person responds to the survey and what region of the country they are from are statistically dependent.

Chi Square	Df	Significance	Cramer's V
2.659	3	.447	.082

In this case we fail to reject the null hypothesis. We conclude that survey response rate and what region the respondent is from are statistically independent of each other.

The geographical information shows that the sample is evenly distributed across the four regions of the United States.

### 3. Academic Specialties vs. Response Rates

Table 4 shows the number of respondents and non-respondents and their academic specialties (Appendix D). The respondent's academic specialty is the area in which they work as delineated in the 1992 McGraw-Hill Directory of Information Systems Faculty.

**TABLE 4**  
**RESPONDENTS AND NON-RESPONDENTS BY ACADEMIC SPECIALTY**

Respond	8.1	8.2	8.3	8.4	8.5	Unk	Total
No	84	66	53	4	3	23	233
Yes	59	53	46	3	1	6	168
Total	143	119	99	7	4	29	401

Ho: No difference between responses to the survey according to academic specialty.

Ha: Whether a person responds to the survey and their academic specialty are statistically dependent.

Chi Square	Df	Significance	Cramer's V
7.043	5	.217	.133

In this case we fail to reject the null hypothesis. We conclude that survey response rate and academic specialty are statistically independent of each other.

#### 4. Degree Types vs. Response Rates

The degree types were split into four disciplines; IS, business, social sciences, and mathematics and physical sciences. The following table shows the breakdown of degree types.

**TABLE 5**  
**DEGREE TYPES**

Information Systems	Business	Social Sciences	Math & Phys Sciences
Sys Design Decision Sci Micro App MIS and IS Art Intel	Admin Statistics Accounting Ops Research Management Finance	Education Org Behavior Economics Psychology Sociology Philosophy	Engineering System Sci Comm Sci

Table 6 shows the degree type and the number of respondents and non-respondents. The four unknowns are people whose names and university were in the MIS directory



but degree type was not listed, and one anonymous respondent who sent in a weighting of the journals. An extra record with no name or biographical information (only the weightings) was created for the anonymous respondent. Therefore, the sample reads 401, vice 400.

**TABLE 6**  
**RESPONDENTS AND NON-RESPONDENTS BY DEGREE TYPE**

Respond	IS	Business	Soc Sci	Math & Phys Sci	Unknown	Total
No	95	55	43	21	19	233
Yes	75	57	17	15	4	168
Total	170	112	60	36	23	401

Ho: No difference in response to survey according to degree type.

Ha: Whether a person responds to the survey and their degree type are statistically dependent.

Chi Square	Df	Significance	Cramer's V
14.277	4	.006	.189

In this case we reject the null hypothesis. Therefore, we can conclude that a relationship exists between the survey response rate and the respondent's degree type.

#### **5. Degree Dates vs. Response Rates**

Table 7 shows the number of respondents and non-respondents and their degree dates (by the decade). The

degree dates were obtained from the MIS directory. The degree dates were consolidated into decades.

**TABLE 7**  
**RESPONDENTS AND NON-RESPONDENTS BY DEGREE DATE**

Respond	1950	1960	1970	1980	1990	Unk	Total
No	6	28	84	79	18	18	233
Yes	5	25	52	62	18	6	168
Total	11	53	136	141	36	24	401

Ho: No difference in response to the survey according to degree date.

Ha: Whether a person responds to the survey and the date they received their degree are statistically dependent.

Chi Square	Df	Significance	Cramer's V
2.437	4	.656	.080

In this case we fail to reject the null hypothesis. We conclude that survey response rate and degree date are statistically independent of each other.

Except for type of degree, we found no statistically significant differences between respondents and non-respondents. Therefore, the respondents to this survey may be characterized as representative of the population of MIS academicians as they are characterized by a random sample.

#### **IV. FINDINGS**

##### **A. IS JOURNAL WEIGHTED RANKING**

As with Glenn's (1971) study, the IS journals were weighted and ranked by prestige according to the respondent's perceptions (Table 8). Because the weights assigned to the IS journals were identified as interval level data, the mean and standard deviation were identified as the appropriate measure of central tendency and dispersion, respectively.

##### **1. Intensity and Extensity of Prestige**

The overall IS journal ranking was also used to study the differences between the intensity and extensity of prestige. Glenn (1971) states, "the mean weight is essentially an indicator of the *intensity* of prestige, whereas the number of respondents who assigned weights (Table 8, N column) is a rough indicator of how well the journal was known among the respondents, or the *extensity* of the journal's prestige." The number of respondents who assigned weights can not be considered a precise measure of the extensity of prestige, since some respondents may have thought a journal prestigious but didn't feel qualified to make a precise judgement.

We tested the precision of our measure of extensity. We formulated a figure of **total prestige** by multiplying the

intensity by the extensity (Table 8, Total column) to see if the order of the IS journal ranking would be affected.

As can be seen in Table 8, *ORSA Journal on Computing* received a higher mean weight (9.2) than *Data Base* (6.88) but the latter was known and evaluated by more respondents. The journals can be ordered by either criteria (mean weight or number of respondents who assigned weights) but there is no sound basis to conclude that neither *ORSA Journal on Computing* or *Data Base* had more overall prestige. On the other hand, if two of the IS journals had similar mean weights, than total prestige could be determined. For instance, *Information and Management* (7.53) and *Omega* (7.5) had similar mean weights. The former was rated by 128 respondents and the latter by 80--an indication of the extensity of the prestige of *Information and Management*.

Table 8 compares the weighted rank order of IS Journals (Mean column) and the rank order when the weighted ranking is multiplied by the N of respondents (Order column). A Spearman's Rank order correlation shows a moderately strong association between the two rank orders ( $\rho = .76$ ). We therefore concluded that the weighted rank order was not a biased indicator of IS journal prestige when accounting for extensity.

**TABLE 8**  
**OVERALL IS JOURNAL WEIGHTING**

Journal	Mean	N	Std Dev	Total	Order
Management Science	12.57	141	6.91	1772.37	1
Information Systems Research	11.43	124	4.48	1417.32	5
Communications of the ACM	11.09	152	4.61	1665.68	2
IEEE Transactions	10.88	122	6.64	1327.36	7
Administrative Science Quarterly	10.58	101	5.79	1068.58	14
ACM Transactions	10.1	129	5.08	1302.9	8
Management Information Systems Quarterly	10.01	154	1.08	1541.54	3
ACM Computing Surveys	9.97	138	5.41	1375.86	6
Harvard Business Review	9.9	147	5.15	1455.3	4
Academy of Management Journal	9.62	113	4.47	1087.06	13
ORSA Journal on Computing	9.2	74	5.97	680.8	22
Decision Sciences	9.14	137	5.11	1252.18	10
IEEE Computer	9.04	123	4.22	1111.92	12
Journal of Management Information Systems	8.98	145	3.06	1302.1	9
Sloan Management Review	8.9	133	4.32	1183.7	11
Accounting Review	8.58	88	5.18	737.88	20
Decision Support Systems	8.4	114	4.62	957.6	17
Interfaces	7.91	127	4.38	1004.57	15
Information and Management	7.53	128	3.02	963.84	16
Omega	7.5	80	2.87	600	24
Data Base	6.88	135	3.64	928.8	18
Journal of Systems Management	6.56	127	3.4	833.12	19
EDP Analyzer	5.89	104	5.7	612.56	23
Datamation	4.87	149	4.65	725.63	21

#### B. PRESTIGE OF UNIVERSITY AND JOURNAL WEIGHTING

We examined the relationship between university ranking and journal weighting. The variable, university ranking, has two possible categories ("ranked" or "not ranked"). Table 9 shows the list of IS journals in order of the "ranked" column. Each column displays the order placement number and mean weight (in parenthesis) for each journal.

**TABLE 9**  
**PRESTIGE OF UNIVERSITY**

Journal	Ranked	Not Ranked
Management Science	1 (14.01)	1 (11.62)
Information Systems Research	2 (12.78)	5 (10.55)
Communications of the ACM	3 (11.51)	3 (10.79)
IEEE Transactions	4 (11.27)	4 (10.58)
Administrative Science Quarterly	4 (11.27)	6 (10.15)
ACM Transactions	5 (10.80)	9 (9.61)
ACM Computing Surveys	6 (10.75)	10 (9.45)
ORSA Journal on Computing	7 (10.69)	16 (8.24)
Harvard Business Review	8 (10.31)	8 (9.64)
Management Information Systems Quarterly	9 (10.96)	2 (10.93)
Decision Sciences	10 (10.13)	14 (8.52)
IEEE Computer	11 (9.64)	12 (8.61)
Sloan Management Review	12 (9.56)	15 (8.46)
Academy of Management Journal	13 (9.46)	7 (9.71)
Journal of Management Information Systems	14 (9.27)	11 (8.80)
Decision Support Systems	15 (9.16)	18 (7.82)
Accounting Review	16 (8.61)	13 (8.57)
Omega	17 (8.08)	20 (7.09)
Interfaces	18 (7.99)	17 (7.86)
Information and Management	19 (7.27)	19 (7.70)
Journal of Systems Management	20 (6.53)	22 (6.58)
Data Base	21 (6.17)	21 (6.95)
EDP Analyzer	22 (5.39)	23 (6.22)
Datamation	23 (4.32)	24 (5.23)

By using university rank as the independent variable, we attempted to determine whether graduating from one of the prestigiously ranked universities would have an effect on how respondents weighted IS journals (Lord, 1993). The TTEST was selected to evaluate this relationship since there were only two categories.

The null hypothesis is that there is no difference in the weighted means of each IS journal and prestige of university. The alternative hypothesis is that there is a

statistically significant difference in the weighted means of each IS journal and prestige of university.

**TABLE 10**

**PRESTIGE OF UNIVERSITY AND JOURNAL WEIGHTING (TTEST)**

<b>Journal</b>	<b>F Value</b>	<b>2-Tail Prob</b>
Academy of Management Journal	1.140	0.616
Accounting Review	1.110	0.725
ACM Computing Surveys	1.090	0.748
ACM Transactions	1.480	0.120
Administrative Science Quarterly	1.470	0.174
Communications of the ACM	1.140	0.559
Data Base	1.050	0.858
Datamation	1.470	0.119
Decision Sciences	1.530	0.081
Decision Support Systems	1.540	0.108
EDP Analyzer	3.280	* 0.0
Harvard Business Review	1.190	0.458
IEEE Computer	2.740	* 0.0
IEEE Transactions	1.470	0.149
Information and Management	1.480	0.146
Information Systems Research	1.950	* 0.01
Interfaces	2.440	* 0.001
Journal of Management Information Systems	1.580	0.056
Journal of Systems Management	2.770	* 0.0
Management Information Systems Quarterly	1.920	* 0.005
Management Science	1.840	* 0.0111
Omega	2.280	* 0.01
ORSA Journal on Computing	1.060	0.879
Sloan Management Review	1.250	0.395

We rejected the null hypothesis for the starred journals in Table 10 with a statistical significance (alpha) of .05 or less. We failed to reject the null hypothesis for non-starred journals. Overall, in sixteen out of twenty-four journals, university ranking did not have a statistically significant relationship with journal weightings.

### C. REGION AND JOURNAL WEIGHTING

We examined the relationship between region and journal weighting. The variable, region, has four possible values (East, Midwest, South, and West). Table 11 shows the list of IS journals in order of the "East" column. All columns display the rank order placement number and mean weight (in parenthesis) for each journal.

**TABLE 11**

#### **REGIONS**

Journal	East	Midwest	South	West
IEEE Transactions	1 (13.75)	7 (10.12)	6 (9.63)	8 (10.48)
Management Science	2 (13.69)	1 (13.77)	1 (11.40)	2 (11.38)
Communications of the ACM	3 (12.11)	5 (10.50)	3 (10.66)	3 (11.32)
Information Systems Research	4 (11.77)	4 (11.12)	2 (11.24)	1 (11.71)
Administrative Science Quarterly	5 (10.92)	3 (12.04)	7 (9.27)	11 (10.24)
ACM Transactions	6 (10.81)	6 (10.32)	12 (8.78)	5 (10.85)
ORSA Journal on Computing	7 (10.26)	16 (8.35)	14 (8.46)	13 (9.88)
ACM Computing Surveys	8 (10.09)	9 (9.77)	10 (9.08)	4 (11.31)
Management Information Systems Quarterly	9 (10.03)	2 (12.32)	5 (9.78)	9 (10.33)
Harvard Business Review	10 (9.78)	11 (9.46)	4 (9.84)	6 (10.79)
Sloan Management Review	11 (9.61)	15 (8.41)	16 (8.13)	12 (9.96)
Decision Sciences	12 (9.46)	12 (9.37)	13 (8.65)	15 (9.31)
Academy of Management Journal	13 (9.26)	10 (9.72)	9 (9.14)	7 (10.71)
IEEE Computer	14 (9.10)	13 (9.00)	11 (9.05)	17 (9.00)
Journal of Management Information Systems	15 (8.71)	14 (8.92)	8 (9.21)	16 (9.04)
Interfaces	16 (8.07)	18 (7.27)	17 (7.69)	18 (8.85)
Decision Support Systems	17 (7.95)	17 (8.07)	15 (8.34)	14 (9.50)
Accounting Review	18 (7.58)	8 (9.96)	21 (6.80)	10 (10.26)
Omega	19 (7.47)	18 (7.27)	19 (7.58)	22 (7.71)
Information and Management	20 (7.23)	19 (7.13)	18 (7.60)	19 (8.54)
Journal of Systems Management	21 (6.34)	21 (5.74)	22 (6.79)	23 (7.43)
Data Base	22 (6.18)	20 (6.47)	20 (7.24)	21 (7.76)
EDP Analyzer	23 (4.52)	22 (4.92)	23 (6.37)	20 (8.27)
Datamation	24 (3.00)	23 (4.64)	24 (5.43)	24 (6.47)



Analysis of variance (ANOVA) was selected as the appropriate statistical test because the independent variable academic region had four possible categories. The null hypothesis is that there is no difference in the weighted means of each IS journal by region. The alternative hypothesis is that there is a statistically significant difference in the weighted means of each IS journal and region.

**TABLE 12**  
**REGION AND JOURNAL WEIGHTING (ANOVA)**

<b>Journal</b>	<b>F Value</b>	<b>Sig. of F</b>
Academy of Management Journal	0.403	0.751
Accounting Review	4.657	* 0.007
ACM Computing Surveys	2.168	0.099
ACM Transactions	1.260	0.296
Administrative Science Quarterly	1.649	0.187
Communications of the ACM	0.222	0.881
Data Base	1.716	0.172
Datamation	3.818	* 0.013
Decision Sciences	1.383	0.255
Decision Support Systems	2.175	0.100
EDP Analyzer	3.870	* 0.014
Harvard Business Review	1.266	0.292
IEEE Computer	0.863	0.465
IEEE Transactions	1.206	0.315
Information and Management	2.299	0.084
Information Systems Research	0.060	0.981
Interfaces	1.458	0.233
Journal of Management Information Systems	0.332	0.802
Journal of Systems Management	3.628	* 0.017
Management Information Systems Quarterly	1.277	0.288
Management Science	1.760	0.161
Omega	0.098	0.961
ORSA Journal on Computing	0.934	0.433
Sloan Management Review	2.186	0.097

We rejected the null hypothesis for the starred journals in Table 12 with a statistical significance (alpha) of .05 or less. We failed to reject the null hypothesis for non-starred journals. Overall, region did not have a statistically significant relationship to journal weighting.

#### **D. ACADEMIC SPECIALTY AND JOURNAL WEIGHTING**

We examined the relationship between academic specialty and journal weighting. The variable, academic specialty, fell into six nominal categories (8.1, 8.2, 8.3, 8.4, 8.5 and unknown). Table 13 shows the list of IS journals in order of the "8.1" column. All columns display the rank order placement number and mean weight (in parenthesis) for each journal.

**TABLE 13**  
**ACADEMIC SPECIALTY**

Journal	8.1	8.2	8.3	8.4	8.5	Unknown
Management Science	1 (12.96)	1 (11.65)	1 (12.70)	3 (8.67)		2 (29.00)
IEEE Transactions	2 (12.18)	11 (8.91)	4 (10.50)	6 (7.50)		3 (24.50)
Management Information Systems Quarterly	3 (11.73)	6 (10.16)	8 (9.81)	1 (10.00)	2 (6.00)	13 (11.87)
Communications of the ACM	4 (11.52)	3 (11.09)	3 (10.73)	7 (7.00)	1 (7.00)	8 (15.00)
Administrative Science Quarterly	5 (11.42)	4 (10.74)	10 (9.40)	5 (8.00)		7 (16.00)
Information Systems Research	6 (10.95)	2 (11.27)	2 (12.18)	11 (5.50)		7 (16.00)
ACM Transactions	7 (10.87)	12 (8.76)	5 (10.20)	6 (7.50)		6 (17.50)
ORSA Journal on Computing	8 (10.86)	19 (7.09)	14 (9.04)	7 (7.00)		1 (30.00)
ACM Computing Surveys	9 (10.47)	8 (9.34)	6 (9.88)	2 (9.67)	3 (5.00)	10 (13.33)
Academy of Management Journal	10 (9.92)	5 (10.41)	16 (8.69)	4 (8.33)		19 (5.33)
Harvard Business Review	11 (9.73)	7 (9.84)	7 (9.85)	1 (10.00)		9 (14.67)
Decision Sciences	12 (9.62)	15 (8.09)	11 (9.39)	8 (8.67)		7 (16.00)
IEEE Computer	13 (9.16)	14 (8.51)	15 (8.95)	9 (6.50)	4 (4.00)	4 (23.00)
Journal of Management Information Systems	14 (8.96)	10 (8.96)	12 (9.12)	10 (5.67)		14 (11.00)
Decision Support Systems	15 (8.65)	18 (7.32)	13 (9.07)	12 (5.00)		12 (12.67)
Sloan Management Review	16 (8.37)	13 (8.64)	9 (9.66)	4 (8.33)		11 (13.00)
Accounting Review	17 (8.10)	9 (9.04)	18 (8.26)	3 (8.67)		12 (12.67)
Interfaces	18 (7.83)	16 (7.73)	17 (8.29)	14 (4.50)		15 (10.00)
Omega	19 (7.52)	17 (7.39)	21 (7.27)	15 (4.00)		5 (20.00)
Information and Management	20 (7.43)	16 (7.73)	19 (7.58)	16 (3.00)		17 (9.00)
Data Base	21 (7.30)	20 (6.21)	20 (7.35)	16 (3.00)	1 (7.00)	18 (8.00)
Journal of Systems Management	22 (6.81)	21 (6.13)	23 (6.58)	10 (5.67)		16 (9.33)
EDP Analyzer	23 (4.97)	22 (5.92)	22 (6.83)	1 (10.00)	2 (6.00)	21 (3.00)
Datamation	24 (4.55)	23 (4.67)	24 (5.67)	13 (4.67)	2 (6.00)	20 (4.00)

Analysis of variance (ANOVA) was selected as the appropriate statistical test because the independent variable academic specialty had six possible categories. The null hypothesis is that there is no difference in the weighted means of each IS journal and academic specialty. The alternative hypothesis is that there is a statistically significant difference in the weighted means of each IS journal according to academic specialty.

**TABLE 14****ACADEMIC SPECIALTY AND JOURNAL WEIGHTING (ANOVA)**

<b>Journal</b>	<b>F Value</b>	<b>Sig. of F</b>
Academy of Management Journal	1.485	0.234
Accounting Review	0.660	0.522
ACM Computing Surveys	0.194	0.90
ACM Transactions	1.065	0.351
Administrative Science Quarterly	1.101	0.339
Communications of the ACM	0.908	0.441
Data Base	1.721	0.170
Datamation	0.422	0.738
Decision Sciences	0.516	0.599
Decision Support Systems	2.280	0.111
EDP Analyzer	0.239	0.869
Harvard Business Review	0.006	0.994
IEEE Computer	1.168	0.329
IEEE Transactions	1.580	0.214
Information and Management	3.228	* 0.045
Information Systems Research	3.077	0.077
Interfaces	1.185	0.312
Journal of Management Information Systems	1.304	0.277
Journal of Systems Management	0.237	0.790
Management Information Systems Quarterly	4.389	* 0.006
Management Science	0.455	0.636
Omega	1.619	0.209
ORSA Journal on Computing	0.739	0.484
Sloan Management Review	0.582	0.561

We rejected the null hypothesis for the starred journals in Table 14 with a statistical significance (alpha) of .05 or less. We failed to reject the null hypothesis for non-starred journals. Overall, academic specialty did not have a statistically significant relationship in journal weighting.

**E. DEGREE TYPE AND JOURNAL WEIGHTING**

We examined the relationship between degree type and

journal weighting. The variable, degree type has five possible values (Information Systems, Business, Social Sciences, Mathematic and Physical Sciences and Unknown). Table 15 shows the list of IS journals in order of the "IS" column. All columns display the rank order placement number and mean weight (in parenthesis) for each journal.

**TABLE 15**  
**DEGREE TYPE**

Journal	IS	Business	Soc. Sci.	Math & Sci.	Unknown
Management Science	1 (13.58)	1 (12.54)	10 (8.90)	4 (11.31)	2 (9.00)
Information Systems Research	2 (11.85)	2 (11.21)	5 (9.75)	1 (12.10)	12 (6.50)
Communications of the ACM	3 (11.66)	4 (10.56)	6 (9.73)	3 (11.57)	3 (8.67)
Administrative Science Quarterly	4 (11.62)	5 (10.41)	13 (8.43)	12 (8.75)	11 (6.67)
Management Information Systems Quarterly	5 (11.34)	9 (9.84)	4 (10.00)	7 (10.71)	1 (10.00)
IEEE Transactions	6 (11.04)	3 (10.93)	11 (8.71)	2 (11.73)	6 (8.00)
ACM Transactions	7 (10.80)	10 (9.67)	14 (8.13)	6 (11.27)	9 (6.83)
Academy of Management Journal	8 (10.20)	8 (9.95)	9 (9.00)	20 (6.00)	7 (7.67)
ACM Computing Surveys	9 (9.94)	7 (10.02)	12 (8.56)	5 (11.29)	8 (7.50)
Harvard Business Review	10 (9.86)	6 (10.15)	3 (11.00)	13 (8.69)	5 (8.25)
Decision Sciences	11 (9.56)	13 (9.13)	21 (7.44)	10 (9.17)	10 (6.75)
ORSA Journal on Computing	12 (9.44)	11 (9.64)	23 (5.67)	15 (7.71)	
Decision Support Systems	13 (9.38)	19 (7.24)	8 (9.33)	19 (7.45)	14 (5.00)
IEEE Computer	14 (9.21)	15 (8.88)	19 (7.75)	8 (10.09)	12 (6.50)
Journal of Management Information Systems	15 (9.14)	14 (9.04)	18 (7.82)	11 (9.00)	4 (8.33)
Accounting Review	16 (8.94)	12 (9.21)	17 (7.88)	24 (4.43)	2 (9.00)
Sloan Management Review	17 (8.79)	16 (8.34)	1 (12.44)	9 (9.45)	8 (7.50)
Interfaces	18 (7.97)	17 (7.89)	20 (7.55)	14 (8.33)	13 (6.00)
Omega	19 (7.82)	20 (7.04)	22 (7.25)	17 (7.63)	
Information and Management	20 (7.47)	18 (7.33)	7 (9.38)	16 (7.67)	13 (6.00)
Data Base	21 (6.83)	22 (6.62)	9 (9.00)	21 (6.36)	12 (6.50)
Journal of Systems Management	22 (5.89)	21 (6.81)	16 (7.90)	18 (7.55)	7 (7.67)
EDP Analyzer	23 (5.84)	23 (5.23)	2 (11.57)	23 (5.00)	15 (4.00)
Datamation	24 (4.48)	24 (4.67)	15 (8.09)	22 (5.23)	15 (4.00)

Analysis of variance (ANOVA) was selected as the appropriate statistical test because the independent variable degree type had five possible categories. The null hypothesis is that there is no difference in the weighted means of each IS journal and degree type. The alternative hypothesis is that there is a statistically significant difference in the weighted means of each IS journal and degree type.

**TABLE 16**  
**DEGREE TYPE AND JOURNAL WEIGHTING (ANOVA)**

<b>Journal</b>	<b>F Value</b>	<b>Sig. of F</b>
Academy of Management Journal	2.305	0.086
Accounting Review	2.020	0.126
ACM Computing Surveys	0.324	0.808
ACM Transactions	0.009	0.999
Administrative Science Quarterly	0.668	0.575
Communications of the ACM	0.955	0.418
Data Base	2.010	0.120
Datamation	1.449	0.235
Decision Sciences	0.926	0.433
Decision Support Systems	1.833	0.150
EDP Analyzer	1.864	0.146
Harvard Business Review	0.696	0.557
IEEE Computer	1.115	0.349
IEEE Transactions	0.306	0.821
Information and Management	2.942	* 0.039
Information Systems Research	0.692	0.560
Interfaces	1.250	0.298
Journal of Management Information Systems	0.095	0.962
Journal of Systems Management	3.159	* 0.03
Management Information Systems Quarterly	2.499	0.065
Management Science	1.042	0.379
Omega	0.159	0.923
ORSA Journal on Computing	0.929	0.436
Sloan Management Review	3.597	* 0.017

We rejected the null hypothesis for the starred journals in Table 16 with a statistical significance (alpha) of .05 or less. We failed to reject the null hypothesis for non-starred journals. Overall, degree type did not have a statistically significant relationship in journal weighting.

#### **F. DEGREE DATE AND JOURNAL WEIGHTING**

We examined the relationship between degree date and journal weighting. The variable, degree date has five possible values (1950's, 1960's, 1970's, 1980's, and 1990's). Table 17 shows the list of IS journals in order of the "1950's" column. All columns display the rank order placement number and mean weight (in parenthesis) for each journal.

**TABLE 17**  
**DEGREE DATE**

Journal	1960	1965	1970	1980	1985
Information Systems Research	1 (12.33)	2 (12.53)	3 (11.08)	3 (10.89)	3 (12.31)
Management Science	2 (11.83)	1 (12.84)	1 (12.51)	1 (12.29)	1 (13.78)
ACM Computing Surveys	3 (10.13)	12 (8.70)	6 (10.53)	10 (9.46)	9 (10.73)
Management Information Systems Quarterly	4 (10.00)	10 (10.21)	8 (10.04)	7 (9.91)	11 (10.00)
ACM Transactions	5 (9.88)	7 (10.80)	11 (9.53)	5 (10.04)	7 (11.13)
IEEE Transactions	6 (9.33)	3 (12.00)	2 (11.23)	6 (10.03)	4 (11.88)
Communications of the ACM	7 (8.78)	5 (11.30)	5 (10.88)	2 (10.99)	2 (12.83)
Harvard Business Review	8 (8.33)	8 (10.55)	10 (9.64)	8 (9.81)	8 (11.07)
Journal of Management Information Systems	9 (7.78)	15 (9.38)	13 (9.28)	16 (8.49)	12 (9.94)
Academy of Management Journal	10 (7.71)	18 (7.81)	7 (10.18)	9 (9.57)	6 (11.33)
Omega	11 (7.50)	17 (7.55)	21 (7.43)	20 (7.39)	18 (7.85)
Interfaces	12 (7.20)	22 (5.63)	17 (8.30)	18 (8.23)	17 (8.75)
IEEE Computer	13 (7.00)	6 (10.74)	16 (8.56)	14 (8.80)	15 (9.44)
Administrative Science Quarterly	14 (6.71)	4 (11.50)	4 (10.90)	4 (10.32)	5 (11.54)
Sloan Management Review	15 (6.43)	13 (9.54)	14 (9.08)	15 (8.55)	10 (10.07)
Decision Sciences	16 (5.88)	11 (9.81)	12 (9.43)	11 (9.28)	16 (8.81)
Information and Management	17 (5.71)	19 (6.88)	19 (8.15)	19 (7.47)	19 (7.73)
Journal of Systems Management	18 (5.50)	20 (6.47)	22 (7.38)	22 (6.28)	21 (8.00)
Data Base	19 (5.38)	21 (6.00)	18 (8.29)	21 (6.33)	20 (7.12)
ORSA Journal on Computing	20 (5.00)	14 (9.45)	9 (9.86)	12 (8.97)	14 (9.50)
Accounting Review	21 (4.80)	9 (10.53)	20 (7.71)	13 (8.82)	15 (9.44)
EDP Analyzer	22 (4.25)	24 (4.20)	23 (7.09)	23 (5.88)	22 (5.80)
Decision Support Systems	23 (4.14)	18 (8.89)	15 (8.76)	17 (8.30)	13 (9.53)
Datamation	24 (3.44)	23 (4.62)	24 (5.33)	24 (4.81)	23 (4.94)

Analysis of variance (ANOVA) was selected as the appropriate statistical test because the independent variable degree date had five possible categories. The null hypothesis is that there is no difference in the weighted means of each IS journal and degree date. The alternative hypothesis is that there is a statistically significant difference in the weighted means of each IS journal and degree date.



**TABLE 18**  
**DEGREE DATE AND JOURNAL WEIGHTING (ANOVA)**

Journal	F Value	Sig. of F
Academy of Management Journal	1.698	0.156
Accounting Review	1.592	0.184
ACM Computing Surveys	0.317	0.866
ACM Transactions	0.324	0.861
Administrative Science Quarterly	1.011	0.406
Communications of the ACM	1.259	0.269
Data Base	2.474	* 0.048
Datamation	0.335	0.854
Decision Sciences	0.956	0.434
Decision Support Systems	1.835	0.127
EDP Analyzer	0.866	0.487
Harvard Business Review	0.513	0.726
IEEE Computer	1.320	0.267
IEEE Transactions	0.529	0.714
Information and Management	1.242	0.297
Information Systems Research	0.693	0.598
Interfaces	1.570	0.187
Journal of Management Information Systems	1.332	0.261
Journal of Systems Management	0.903	0.464
Management Information Systems Quarterly	0.341	0.850
Management Science	0.190	0.943
Omega	0.061	0.993
ORSA Journal on Computing	0.443	0.777
Sloan Management Review	1.046	0.386

We rejected the null hypothesis for the starred journals in Table 18 with a statistical significance (alpha) of .05 or less. We failed to reject the null hypothesis for non-starred journals. Overall, degree date did not have a statistically significant relationship in journal weighting.

In summary, none of the independent variables (prestige of university, region, academic specialty, degree type, or degree date) had an overall statistically significant relationship with the journal weightings.

## V. DISCUSSION AND ANALYSIS

### A. COMPARISON OF RANKINGS

Table 19 gives the results of six studies in which IS journals were ranked. These studies were conducted from 1983 to 1993. There is a noticeable similarity in the rankings. All of the rankings have at least five of the top ten journals in common, although not in the same order. *Management Science*, *MISQ*, and *Communications of the ACM* were among the top ten journals in all six studies. *Harvard Business Review*, *Computing Surveys* and *Data Base* were present in five and four, respectively, of the six rankings.

**TABLE 19**

**THE TOP TEN JOURNALS AS COMPARED IN SIX STUDIES**

<b>Doke &amp; Luke</b>	<b>Vogel &amp; Wetherbe</b>	<b>Hamilton Ives &amp;</b>	<b>Shim et al.</b>	<b>Ramesh &amp; Stohr</b>	<b>Hayes &amp; Huskey</b>
MISQ	Comms of the ACM	MISQ	Mgmt Science	Mgmt Science	Mgmt Science
J of MIS	Harvard Bus Rev	EDP Analyzer	Comms of the ACM	Ops Research	IS Research
Comms of the ACM	MISQ	Data Base	MISQ	Comms of the ACM	Comms of the ACM
Decision Sciences	Info & Mgmt	Mgmt Science	Harvard Bus Rev	J of the ACM	IEEE Trans
Mgmt Science	Sloan Mgmt Rev	Data-mation	Decision Sciences	ACM Trans Database	Admin Science Qtrly
Data-mation	Mgmt Science	Harvard Bus Rev	Sloan Mgmt Rev	IEEE Trans S/W Eng	ACM Trans
Harvard Bus Rev	J of Data Education	Computing Surveys	Info and Mgmt	Art Intel	MISQ
J of Comp IS	Data-mation	Comms of the ACM	Computing Surveys	Cognitive Science	ACM Comp Surveys
J of IS Mgmt	Data Base	Trans on Dbase Sys	IBM Sys Journal	MISQ	Harvard Bus Rev
Data Base	Trans on Dbase Sys	Info and Mgmt	Data Base	Computing Surveys	Acad of Mgmt J

## **B. INTRODUCTION OF NEW JOURNALS**

Some of the variations in the top ten rankings may be attributed to the introduction of new journals. Not only are new journals created but some journals cease to be published. Exact beginning or ending publication dates of the journals listed in all six surveys were not researched, but at least one new journal, *Information Systems Research* was included in the last two studies (Ramesh and Stohr, 1987, and Hayes and Huskey, 1993). Journals need time to build a reputation, *Information Systems Research* may not have been established enough to make the top ten journal list in Ramesh and Stohr's study, but it did in our study. This explains why earlier studies would have similar core lists of journals, they may have used a smaller list due to the lack of availability of newly published IS journals. It was also noted that *EDP Analyzer* had changed its name to *ADP Analyzer*.

## **C. SAMPLE DIFFERENCES**

In addition to the introduction of new journals, differences in the samples taken by each study could account for the variation in ranking. Doke and Luke (1987) surveyed deans of business schools (with instructions to distribute them to professors, associate professors and assistant professors). How the deans chose to distribute the surveys among the faculty is unknown. Doke and Luke (1987) sent

their surveys primarily to business schools, whereas the surveys in our study went directly to MIS faculty .

Hamilton and Ives (1983) sent surveys to "knowledgeable recognized experts." Shim et al. (1987) used only "outstanding" senior researchers for their survey. They excluded any junior faculty or lesser known senior faculty opinions, even though the latter may be the decision makers in hiring, tenure or promotion situations.

The survey in our study validates the findings of previous studies of IS journal rankings. MIS academicians have not significantly shifted their subjective prestige ranking of IS journals in the last decade. The results show that half of the journals thought of as prestigious in five other surveys continue to be thought of highly in our survey.

#### **D. VALUE OF SURVEY METHODOLOGY**

The main value of this study is the use of prestige weights rather than ranking. Prestige weights allow decision makers to quantify the differential prestige of journals in hiring, promotion or tenure decisions. If a candidate for promotion has articles in different journals, the mu frequencies of the articles in journals can be multiplied by the prestige weight to obtain a more meaningful indicator of the value of a publishing record. A ranking of journals would not have given any distance type

measure between the journals, only the order in which they are perceived. A weighting gives both a distance between journals in addition to order of preference.

The weighting of IS journals can also be valuable to those who are evaluating prestige and productivity of IS departments. (Allen, 1993)

#### **E. SURVEY DIFFERENCES**

Several rankings of IS journals have been conducted (Hamilton and Ives, 1983; Doke and Luke, 1987; Vogel and Wetherbe, 1984). Our study used a different survey methodology. We used a weighting to develop a ranking. As discussed previously, the weighting can provide a tool for decision makers to use.

We used a random sample of MIS professionals from the *1992 McGraw-Hill Directory of Management Information Systems Faculty*. Ramesh and Stohr (1987) also used a random sample from the MIS directory, but limited their sample to CS professionals. We used a larger sample size (400) compared to the 200 used by Ramesh and Stohr (1987). The sample of 400 in this study was not limited to one segment of the MIS community, but included faculty members from all academic ranks.

Our study differed from earlier studies in that it compared respondents to non-respondents in regard to prestige of university, region, academic specialty, degree

type, and degree date. We determined if any of the independent variables were statistically significant between respondents and non-respondents. The database allowed us to compare weights calculated by cross-referencing respondents with certain variables. As far as we know, this has not been done in any previous studies. As seen by our results in Tables 8 through 18, there was no significant difference in the ranking derived from the mean weights between the different categories of each variable.

The comparison of independent variables showed no significant differences in IS journal weightings. The respondent's prestige of university, region, academic specialty, degree type, or degree date had no significant impact on how the journals were weighted. This proves that our random sample represented an even population distribution between all the categories of the independent variables.

#### **F. LESSONS LEARNED**

There are several lessons that were learned during the survey process. But there were three aspects of our study, had we the opportunity, would do differently.

One of the studies (Hawkins et al., 1973) of economic journals used an interesting tactic. The inclusion of fictitious journals in their core list of journals proved that respondents do recognize general academic journals more

than specialized academic journals. It was, however, surprising that one of the fictitious journals (J.E.S.T.) was recognized and ranked in the top third of their list of economic journals.

Although we accepted suggestions for additional journals to the core list of IS journals from respondents in the test survey, we did not leave an open-ended opportunity for respondents in the actual survey. A more complete and diverse list of IS journals could have been compiled and we would have avoided any bias created by limiting the list of core journals.

If we had started the survey process earlier, a follow up survey could have been done. Even a reminder (with the original survey) could have been sent to those who had not responded after a set period of time and increased our response rate.

#### G. CONCLUSION

The weighted ranking of IS journals could be used by MIS faculty when making decisions in regards to hiring, promotion, and tenure. This was accomplished by using a survey asking respondents to weight journals according to their perceived prestige value. A ranking was formed based on the mean weights of the IS journals. Statistical analysis showed that independent variables did not have a significant impact on the perceived prestige of journals.



Professionals can use this study for exercises in performance evaluation of research organizations. We have researched several methodologies in other disciplines for ranking journals. Our research methodology uses aspects of these different methodologies and can provide a tool for measuring performance evaluation.

Currently DoD is trying to use the CIM initiative and business re-engineering to improve business practices. These two processes are intertwined to evaluate performance and make it more efficient. Our study is of particular interest to performance evaluations in the context of DoD's policy of re-engineering business processes. The research methodology explored techniques to quantify an impressionistic rating. This would be useful in quantifying ratings of performance evaluations in management of DoD laboratories and schools.

## APPENDIX A

Dear Colleague:

We are sending out this survey as part of a thesis project that will attempt to rank the Information System core journals in order to show which publications are held in the highest esteem by Management Information System faculty members. This should be of great value to researchers looking to publish in order to get tenure.

The following list of Information Systems publications is provided for you to rank (one through ten) in accordance with your judgement of the importance of their contributions to the field. Of course, the importance of the individual publications in certain categories may vary greatly, but think in terms of their overall importance.

Please put the rank number in the space provided after the publication title.

After completing the form, please return it via the self-addressed stamped envelope. Please indicate if you would like a copy of the results.

We sincerely thank you for all your assistance in this project. If you have any questions please call us at (408) 656-7124.

Name \_\_\_\_\_

JOURNAL

RANKING (top ten only)

Academy of Management Journal	_____
Accounting Review	_____
ACM Computing Surveys	_____
Administrative Science Quarterly	_____
Communications of the ACM	_____
Data Base	_____
Datamation	_____
Decision Sciences	_____
EDP Analyzer	_____
Harvard Business Review	_____
IEEE Computer	_____
Information and Management	_____
Information Systems Research	_____
Interfaces	_____
Journal of Management Information Systems	_____
Journal of Systems Management	_____
Management Information Systems Quarterly	_____
Management Science	_____
Omega	_____
Sloan Management Review	_____

## APPENDIX B

Dear Colleague:

We are sending out this survey as part of a thesis project that will attempt to rank the Information System core journals in order to show which publications are held in the highest esteem by Management Information System faculty members. This should be of great value to researchers looking to publish in order to get tenure.

On the form please assign weights to the following kinds of information system publications according to your judgment of their prestige in the field. Of course, the importance of individual publications in each category varies greatly, but please think in terms of their average importance. Use the Management Information Systems Quarterly (MISQ) as your standard of reference. A weight of 10 has been arbitrarily assigned to MISQ, so that a publication only half as important as MISQ should be assigned a weight of 5, a publication twice as important as MISQ should be assigned a weight of 20, and so forth. Negative values are acceptable.

If you do not know enough about a journal to assign a weight to its articles, please place an X in the space provided for the weight.

Remember, a weight of 10 has arbitrarily been assigned to articles in the MISQ. Use this as your standard for assigning other weights.

After completing the form, please return it via the self-addressed stamped envelope. Please indicate if you would like a copy of the results.

We sincerely thank you for all your assistance in this project. If you have any questions please call us at (408) 656-7124.

<u>JOURNAL</u>	<u>WEIGHT</u>
Academy of Management Journal	_____
Accounting Review	_____
ACM Computing Surveys *	_____
Administrative Science Quarterly	_____
Communications of the ACM	_____
Data Base	_____
Datamation	_____
Decision Sciences	_____
EDP Analyzer **	_____
Harvard Business Review	_____
IEEE Computer ***	_____
Information and Management	_____
Information Systems Research	_____
Interfaces	_____
Journal of Management Information Systems	_____
Journal of Systems Management	_____
Management Information Systems Quarterly	10
Management Science	_____
Omega	_____
Sloan Management Review	_____

\* ACM: Association for Computing Machinery

\*\* EDP: Electronic Data Processing

\*\*\* IEEE: Institute of Electronic and Electrical Engineering



## DEPARTMENT OF THE NAVY

NAVAL POSTGRADUATE SCHOOL

MONTEREY, CA 93943-5100

Dear Colleague,

I beg your indulgence of an imposition upon your time and patience. I am asking you to assign relative weights to a selection of IS journals.

You may find this exercise to be a bit artificial. I cannot dismiss that assessment. Nonetheless, I speculate that many of us form a ranking or rating of IS publications in our minds, however impressionistic they may be. We may do it when evaluating a colleague's vita, when assessing the credibility of an IS department or when musing about your own value in the academic market.

This is merely an attempt to impose a quantification exercise on what we may already be doing. This rating technique has been borrowed from reference disciplines in the social sciences. I just want to see if it is applicable within the IS community.

On the attached sheet, please assign a weight to each journal about which you have an opinion. If you have no opinion about a journal, put an X in the space. Use the *Management Information Systems Quarterly* as your standard of reference. A weight of 10 has been arbitrarily assigned to *MISQ*. A publication that you regard as half the worth of *MISQ* would get a 5. A publication you deem to be twice the value of *MISQ* would get a 20. And so on. Negative values are acceptable

You may adopt any perspective or criteria you wish as the yardstick by which you are assessing these journals, e.g. value to the IS community, impact of published articles, quality of research, standing of authors, etc. The list of IS journals on the accompanying score sheet has been adopted from Davis(1980), Hamilton & Ives(1983) and Vogel & Wetherbe(1984).

Thank You.

William James Haga  
Associate Professor, Information Systems

**JOURNAL****WEIGHT**

Academy of Management Journal	_____
Accounting Review	_____
ACM Computing Surveys	_____
ACM Transactions (various specialties)	_____
Administrative Science Quarterly	_____
Communications of the ACM	_____
Data Base	_____
Datamation	_____
Decision Sciences	_____
Decision Support Systems	_____
EDP Analyzer	_____
Harvard Business Review	_____
IEEE Computer	_____
IEEE Transactions (various specialties)	_____
Information and Management	_____
Information Systems Research	_____
Interfaces	_____
Journal of Management Information Systems	_____
Journal of Systems Management	_____
Management Information Systems Quarterly	_____
Management Science	_____
Omega	_____
ORSA Journal on Computing	_____
Sloan Management Review	_____

## APPENDIX D

The following describes each academic specialty:

Academic Specialty 8.1: Design and Evaluation of Information Systems, (The development of approaches for the analysis, design, specification, and evaluation of computer-assisted information systems).

Academic Specialty 8.2: The Interaction of Information Systems, (The investigation of the relationships and interactions among four major components: information systems, information technology, organizations and society. The focus is on the interrelationships, not on the components themselves).

Academic Specialty 8.3: Decision Support Systems, (The development of approaches for applying information systems technology to increase the effectiveness of decision-makers in situations where the computer system can support and enhance human judgements in the performance of tasks that have elements which cannot be specified in advance).

Academic Specialty 8.4: Office Information Systems, (The study and development of information systems for office work. Such systems are concerned with the support of, and communication in connection with, human activities in an organization. They are characterized by, among other things, variety, informality and irregularity, but often



interact strongly with the more orderly, formal and predictable computer-based information systems used in that organization).

Academic Specialty 8.5: Information Systems in Public Administration, (Information systems in public administration at international, national, regional, and local levels. The relationship between central and local use of information systems, and the provision of citizen services, together with the accomplishment of social goals). Again, academic specialties were not listed in all cases, hence the unknowns.

## LIST OF REFERENCES

- Allen, C. R., "Assessing Research Productivity of Academic MIS Departments," Sept. 1993.
- Babchuk, N., and Bates, A. P., "Professor or Producer: The Two Faces of Academic Man," *Social Forces*, May 1962, pp. 341-348.
- Cabell, D. W. E., *Cabell's Directory of Publishing Opportunities in Business and Economics*, 4th ed., Cabell Publishing Company, 1988.
- Coe, R. K., and Weinstock, I., "Evaluating the Finance Journals," *The Journal of Financial Research*, 6, (1983), pp. 345-349.
- Davis, G. B., "A Systematic Evaluation of Publications for Promotion of MIS Academics," Proc. First International Conference on Information Systems, Dec. 1980, pp. 206-216.
- Davis, F., and Fry, J. P., "Information Systems Scholarly Journals," Computer Information Systems Department, Michigan Business School, The University of Michigan, Oct. 1986.
- Doke, E. R., and Luke, R. H., "Perceived Quality of CIS/MIS Journals Among Faculty: Publishing Hierarchies," *The Journal of Computer Information Systems*, Summer 1987, pp. 30-33.
- Ellis, L. U., and Durden, G. C., "Why Economist Rank Their Journals the Way They Do," *Journal of Economics and Business*, 43, No. 3 (1991), pp. 265-270.
- Gibbons, J. D. and Fish, M., "Ranking of Economics Faculties and Representation on Editorial Boards of Top Journals," *Journal of Economic Education*, 22, No. 4 (1991), pp. 361-372.
- Glenn, N. D., "American Sociologist's Evaluation of Sixty-Three Journals," *The American Sociologist*, Nov. 1971, pp. 298-303.
- Gordon, M. E., and Purvis, J. E., "Journal Publication Records as a Measure of Research Performance in Industrial

Relations," *Industrial and Labor Relations Review*, 45, No. 1 (1991), pp. 194-201.

Hamilton, S., and Ives, B., "The Journal Communication System for MIS Research," *Data Base*, Winter 1983, pp. 3-14.

Hamilton, S., and Ives, B., "Knowledge Utilization Among MIS Researchers," *MIS Quarterly*, Dec. 1982, pp. 61-77.

Hargens, L. L., "Scholarly Consensus and Journal Rejection Rates," *American Sociological Review*, 53, (1988), pp. 139-151.

Hawkins, R. G., Ritter, L. S., and Walter, I., "What Economist Think of Their Journals," *Journal of Political Economy*, July/Aug. 1973, pp. 1017-1032.

Knudsen, D. D., and Vaughan, T. R., "Quality in Graduate Education: A Re-evaluation of the Rankings of Sociology Departments in the Cartter Report," *The American Sociologist*, Feb. 1969, pp. 12-19.

Koong, K. S., and Weistroffer, H. R., "Faculty Usage of Management Information Systems Journals: A Survey," *The Journal of Computer Information Systems*, Fall 1989.

Laband, D. N., "Publishing Favoritism: A Critique of Department Rankings Based on Quantitative Publishing Performance," *Southern Economic Journal*, 52, (1985), pp. 510-515.

Lending, D., and Wetherbe, J. C., "Update on MIS Research: A Profile of Leading Journals and U. S. Universities," *Data Base*, Summer 1992, pp. 5-11.

Lewis, L. S., "On Subjective and Objective Rankings of Sociology Departments," *The American Sociologist*, May 1968, pp. 129-131.

Liebowitz, S. J., and Palmer, J. P., "Assessing the Relative Impacts of Economics Journals," *Journal of Economic Literature*, 22, (1984), pp. 77-88.

Lord, M., "America's Best Graduate Schools: Exclusive Ranking," *U. S. News and World Report*, 114, No. 11 (1993), pp. 51-58.

Mabry, R. H., and Sharplin, A. D., "The Relative Importance of Journals Used in Finance Research," *The Journal of Financial Research*, 8, No. 4 (1985), pp. 287-296.

McGraw-Hill, 1992 Directory of Information Systems Faculty.

Medoff, M. H., "The Ranking of Economists," *Journal of Economic Education*, 20, No. 4 (1989), pp. 405-415.

Nord, J. H., and Nord, G. D., "MIS Research: A Systematic Evaluation of Leading Journals," *ISBCUG Quarterly*, 21 July 1991, pp. 8-13.

Ramesh, B., and Stohr, E. A., "Survey of Journals and Proceedings in Computer Science and MIS," forthcoming.

Shamblin, D. H., "Prestige and the Sociology Establishment," *The American Sociologist*, May 1970, pp. 154-156.

Shim, J. P., English, J. B., and Drawer, P. O., "Five Top Rated MIS Journals: 1980-1986," Proc. Decision Sciences Institute, Nov. 1987, pp. 202-205.

Vogel, D. R., and Wetherbe, J. C., "MIS Research: A Profile of Leading Journals and Universities," *Data Base*, Fall 1984, pp. 3-14.

### DISTRIBUTION LIST

- |    |                                                                                                |   |
|----|------------------------------------------------------------------------------------------------|---|
| 1. | Defense Technical Information Center<br>Cameron Station<br>Alexandria, Virginia 22304-6145     | 2 |
| 2. | Library, Code 0052<br>Naval Postgraduate School<br>Monterey, California 93943-5002             | 2 |
| 3. | William James Haga, Code AS/HA<br>Naval Postgraduate School<br>Monterey, California 93943-5002 | 5 |
| 4. | Frank Barrett, Code AS/BA<br>Naval Postgraduate School<br>Monterey, California 93943-5002      | 1 |
| 5. | Lieutenant TeddiAnn Hayes<br>2520 East Main Road<br>Portsmouth, Rhode Island 02871             | 2 |
| 6. | Lieutenant Winnie L. Huskey<br>353 Trenton Road<br>Fairless Hills, Pennsylvania 19030          | 2 |